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भारतीय मानक

# पेट्रोलियम उद्योग – शब्दावली

**भाग 7 अन्य तकनीकी शब्द**

*(पहला पुनरीक्षण)*

*Indian Standard*

# PETROLEUM INDUSTRY — TERMINOLOGY

## PART 7 MISCELLANEOUS TERMS

*( First Revision )*

ICS 10.040.75; 75.080

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**BUREAU OF INDIAN STANDARDS**
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG
NEW DELHI 110002

*September* 2000

**Price Group 2**

Petroleum Products Sectional Committee, PCD 3

## FOREWORD

This Indian Standard (Part 7) (First Revision) which is identical with ISO 1998-7 : 1998 'Petroleum industry — Terminology — Part 7 : Miscellaneous terms' issued by the International Organization for Standardization (ISO) was adopted by the Bureau of Indian Standards on the recommendation of Petroleum Products Sectional Committee and approval of the Petroleum, Coal and Related Products Division Council.

This standard was first published in 1968 with a view to eliminate the ambiguity arising from different interpretations of terms used in petroleum trade and industry, and to establish a generally recognized terms. Since the industry has progressed manifolds over the years, a need was felt to bring in newer terms. The Committee, therefore decided to revise this standard to completely align with ISO 1998-7 :1998 under the dual numbering system. Accordingly, the title has been changed as 'Petroleum industry — Terminology : Part 7 Miscellaneous terms'.

It is envisaged to issue this standard in eight different parts, each dealing with a specific aspect. The other parts in this series are as under:

| | |
|---|---|
| Part 1 | Raw materials and products |
| Part 2 | Properties and tests |
| Part 3 | Exploration and production |
| Part 4 | Refining |
| Part 5 | Transport, storage, distribution |
| Part 6 | Measurement |
| Part 8 | General and index |

The English version of the text of ISO standard has been retained without deviations for publication as Indian Standard. Certain conventions are, however, not identical to those used in Indian Standards. Attention is particularly drawn to the following:

a) Wherever the words 'International Standard' appear referring to this standard, they should be read as 'Indian Standard'.

b) Comma (,) has been used as a decimal marker while in Indian Standards, the current practice is to use a point (.) as the decimal marker.

For tropical countries like India, the standard temperature and the relative humidity shall be taken as 27 ± 2°C and 65 ± 5 percent respectively.

# *Indian Standard*

# PETROLEUM INDUSTRY — TERMINOLOGY

## PART 7 MISCELLANEOUS TERMS

## *( First Revision )*

## 1 Scope

This part of ISO 1998 consists of a list of terms, with the corresponding definitions, in use in the petroleum industry and that are not definitely relevant to one of the six categories of other parts of this International Standard.

ISO 1998 is intended to cover the purposes of the part of the petroleum industry dealing with crude oils and petroleum products, that means all related operations arising from the production field to the final user. It is not intended to cover either petroleum equipment, or any operation in the field. However, some pieces of equipment or some operations of exploration and production are defined. The corresponding terms were introduced only when they appear in a definition of a product or process and when their definition was found necessary for understanding or for avoiding any ambiguity. Where a terminology of petroleum equipment is needed, it corresponds to the scope of ISO/TC 67, *Materials, equipment and offshore structure for petroleum and natural gas industries.*

## 2 Normative reference

The following standard contains provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the edition indicated was valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent edition of the standard indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 1998-99:—[1], *Petroleum industry—Terminology—Part 99 : General and index.*

## 3 Term numbering

The general classification and numbering system used in ISO 1998 employs digits grouped in three categories:

x.yy.zzz

where

x is the part number of ISO 1998, in this case Part 7;

yy is the subcategory in which the term appears. Part 7 has four subcategories:
- 00 terms relating to the automobile
- 10 terms relating to lubricants
- 90 miscellaneous terms
- 95 new terms
- 99 acronyms

zzz is the serial number of the individual term.

## 4 Index

See ISO 1998-99.

## 5 Order of listing

Terms are listed in serial number order.

## 6 Introduction of new terms

All new terms will, in a first step, be introduced in subcategory 7.95, before they are included in the related part when a revision is decided upon.

## 7.00 Terms relating to the automobile

**7.00.001**
**driveability**
overall proper operation of an engine

NOTE For example : ease of starting, absence of rough running and unexpected stops.

**7.00.010**
**self-ignition**
ignition of the air-fuel mixture in a spark ignition

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[1] To be published.

engine other than by the passage of the spark

NOTE Self-ignition may accompany any kind of abnormal ignition : pre-ignition, post-ignition and run-on.

7.00.011
**pre-ignition**
ignition of the air-fuel mixture in spark ignition engine occurring before the passage of the spark

NOTE Generally, the gases are ignited by contact with hot surfaces such as the exhaust valve or the spark plug.

7.00.012
**post-ignition**
ignition of a portion of the air-fuel mixture in a spark-ignition engine occurring later than and independently of the passage of the normal ignition spark and before the arrival of the flame front

NOTE It is sometimes associated with knocking.

7.00.013
**run-on**
continued running of a spark-ignition engine after the normal ignition source has been shut off, the air-fuel mixture igniting by contact with hot surfaces or residual gas

7.00.014
**knocking**
phenomenon, often audible, caused by self-ignition of the air/fuel mixture in a spark-ignition engine

7.00.020
**vapour lock**
accumulation of motor gasoline vapour in the fuel system of an engine in sufficient amounts to disturb or prevent the flow of fuel

7.00.030
**sludge in an engine**
deposit, principally composed of engine oil, fuel residues and oxidation products which does not drain from engine parts, but which can be removed by wiping with a soft cloth

7.00.040
**varnish in an engine**
**lacquer**
hard, dry, generally lustrous deposit, sometimes called lacquer, which cannot be removed by wiping with a soft cloth

7.00.050
**warm-up**
period necessary for an engine to attain the temperature required for normal operation

## 7.10 Terms relating to lubricants

7.10.002
**lubrication**
action aiming at reducing, using lubricants, wear and surface damage of metallic surfaces in relative motion

7.10.003
**lubricating film**
thin layer of lubricant seeking to minimize the direct contact between two solid surfaces in relative motion

7.10.004
**stick-slip**
phenomenon observed when the sliding of two contacting surfaces is not regular

NOTE The lubricants for machine-tool slideways are specially designed to avoid this phenomenon.

7.10.005
**type of lubrication**
**lubrication regime**
in given conditions of load and relative speed of two surfaces in motion, type of lubrication characterized by the lubricant film thickness in comparison with the roughness of the contacting surfaces

7.10.006
**boundary lubrication**
type of lubrication characterized by a very thin lubricant film, the thickness of which is very near to the roughness of the contacting surfaces

NOTE In boundary lubrication, friction is high and the interaction between surfaces important. The lubricant principally acts through its viscosity.

7.10.007
**hydrodynamic lubrication**
type of lubrication characterized by a thick lubricant film, the thickness of which is high when compared to the roughness of the contacting surfaces

NOTE In hydrodynamic lubrication, friction is low and the contacting surfaces completely separated. The lubricant principally acts through its viscosity.

**7.10.008**
**mixed lubrication**
type of lubrication intermediate between hydrodynamic lubrication and boundary lubrication, where the lubricant film is thick, but however not enough to ensure a complete separation of the surfaces

NOTE In mixed lubrication, friction varies with the fraction of surface in contact : the higher the fraction of surface in contact, the higher the friction. The lubricant acts through its viscosity and its chemical activity.

**7.10.009**
**elastohydrodynamic lubrication**
type of lubrication occurring when the surfaces in relative motion elastically deform through the action of the load

NOTE This is the type of lubrication encountered in gear and roller-bearing lubrication.

## 7.90 Miscellaneous terms

**7.90.010**
**barrel**
unit of measurement (volume) used for petroleum and its products and corresponding to 42 US gallons, 35 UK gallons, 159 litres

**7.90.011**
**barrel per calendar day**
throughput of oil expressed in barrels processed over a period of time divided by the number of days in that period

**7.90.012**
**barrel per stream day**
throughput of oil expressed in barrels processed per day when the plant is running the whole of the time

**7.90.060**
**jerrycan**
name of a specially designed can of about 20 litres capacity

## 7.99 Acronyms

| | | | See |
|---|---|---|---|
| 7.99.001 | bbl | barrel | 7.90.010 |
| 7.99.002 | BPCD | barrel per calendar day | 7.90.011 |
| 7.99.003 | BPSD | barrel per stream day | 7.90.012 |

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This Indian Standard has been developed from Doc : No. PCD 3 (1815).

**Amendments Issued Since Publication**

| Amend No. | Date of Issue | Text Affected |
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